

AMENDMENTS TO THE CLAIMS:

Please cancel claims 1-19 without prejudice or disclaimer and add new claims 20-76 as follows. This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS

Claims 1-19 (Canceled).

20. (New) A process for dyeing keratin fibers, comprising
applying to the keratin fibers a composition comprising at least one latent pigment, wherein said at least one latent pigment is soluble in a medium that is suitable for dyeing, and
then chemically, thermally or photochemically converting the latent pigment in the keratin fibres into a water-insoluble pigment.

21. (New) The process according to Claim 20, wherein the keratin fibers are human keratin fibers.

22. (New) The process according to Claim 21, wherein the human keratin fibers are hair.

23. (New) The process according to Claim 20, wherein the at least one latent pigment is chosen from those of formula (I):



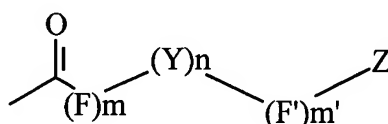
wherein:

x is an integer ranging from 1 to 8,

A is the chromophoric radical of dyes comprising a hetero atom chosen from N, O and S, wherein

- when x is equal to 1, B is chosen from groups of formula (II),
- when x is greater than 1, B is chosen from a hydrogen atom and groups of formula (II),

with the proviso that when x is greater than 1, B is at least once a group of formula (II):



(II)

wherein

Z is chosen from cationic water-solubilizing groups Z⁺ and polyethylene glycol residues,

Y is a hetero atom chosen from N, O and S,

F and F', which can be identical or different, are chosen from linear and branched C₁-C₁₄ alkylene chains, which can optionally comprise hetero atoms and can optionally be substituted with at least one entity chosen from hydroxyl radicals, amino radicals, and halogens,

n, m and m', which may be identical or different are chosen from zero and 1, and

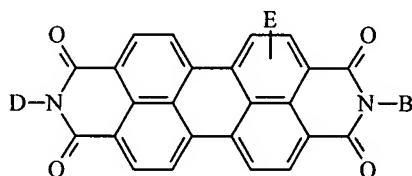
B is linked to a hetero atom of the chromophore A.

24. (New) The process according to Claim 23, wherein Y is oxygen.

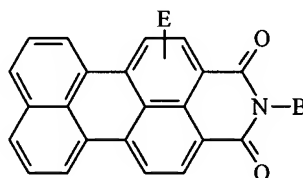
25. (New) The process according to Claim 23, wherein Z^+ is chosen from aliphatic groups, aromatic groups, saturated and unsaturated carbocyclic groups and heterocyclic groups, and wherein Z^+ bears at least one quaternized nitrogen atom.

26. (New) The process according to Claim 23, wherein the chromophoric radical A is a dye radical chosen from perylene, quinacridone, dioxazine, isoindoline, indigo, bisisoindoline, phthalocyanin, pyrrolopyrrole, quinophthalone, azo, anthraquinone, indanthrone, isoindolinone, naphthoquinone, benzoquinone and azomethine radicals.

27. (New) The process according to Claim 26, wherein the perylene radicals are chosen from those of formulae (III) and (IV):



(III)



(IV)

wherein:

D is chosen from a hydrogen atom; halogens; linear and branched C_1 - C_{24} alkyl groups; phenyl, benzyl and phenethyl groups optionally substituted with a C_1 - C_6 alkyl group; and groups of formula B,

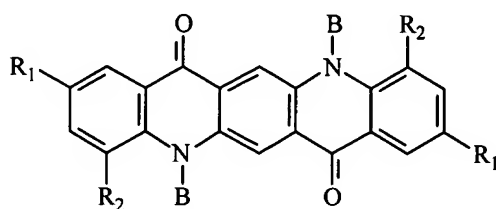
E is chosen from a hydrogen atom, halogens, linear and branched C_1 - C_{24} alkyl groups, C_1 - C_6 alkoxy groups and phenyl groups, and

B is chosen from a hydrogen atom and groups of formula (II),
with the proviso that at least one B is a group of formula (II).

28. (New) The process according to Claim 27, wherein D is chosen from linear and branched C₁-C₆ alkyl groups.

29. (New) The process according to Claim 27, wherein E is chosen from linear and branched C₁-C₆ alkyl groups.

30. (New) The process according to Claim 26, wherein the quinacridone radicals are chosen from those of formula (V):



(V)

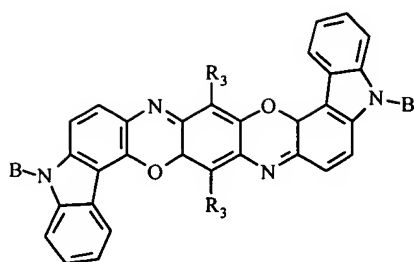
wherein

R₁ and R₂, which may be identical or different, are chosen from hydrogen atoms, halogens, linear and branched C₁-C₂₄ alkyl groups, C₁-C₆ alkoxy groups and phenyl groups, and

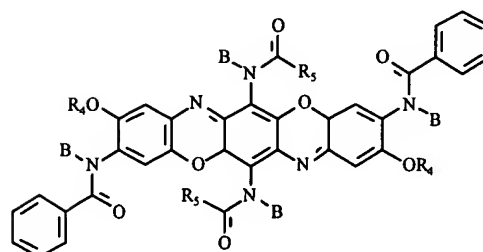
B is chosen from a hydrogen atom and groups of formula (II), with the proviso that at least one B is a group of formula (II).

31. (New) The process according to Claim 30, wherein R₁ and R₂, which may be identical or different, are chosen from linear and branched C₁-C₆ alkyl groups.

32. (New) The process according to Claim 26, wherein the dioxazine radicals are chosen from those of formulae (VI) and (VII):



VI



VII

wherein

R₃ is chosen from a hydrogen atom, halogens, and linear and branched C₁-C₂₄ alkyl groups,

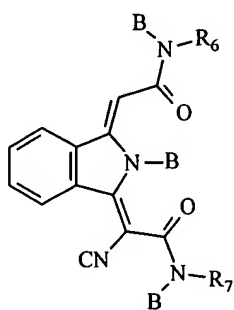
R₄ and R₅, which may be identical or different, are chosen from C₁-C₄ alkyl groups, and

B is chosen from a hydrogen atom and groups of formula (II),

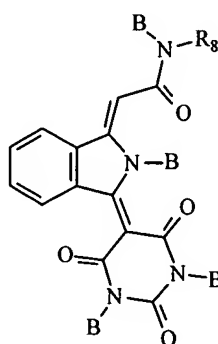
with the proviso that at least one B per formula is a group of formula (II).

33. (New) The process according to Claim 32, wherein R₃ is chosen from linear and branched C₁-C₆ alkyl groups.

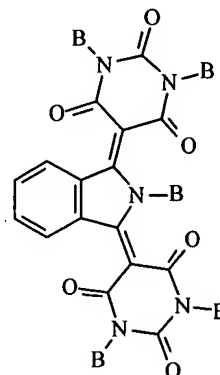
34. (New) The process according to Claim 26, wherein the isoindole radicals are chosen from those of formulae (VIII), (IX) and (X):



(VIII)



(IX)



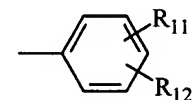
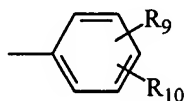
(X)

wherein

R₆ is chosen from groups of formula (XI),

R₇ is chosen from a hydrogen atom, linear and branched C₁-C₂₄ alkyl groups, benzyl groups, and groups of formula (XII),

R₈ is chosen from a hydrogen atom, groups of formula (XI), and the group B,



(XI)

(XII)

R₉, R₁₀, R₁₁ and R₁₂, which may be identical or different, are chosen from a hydrogen atom, halogens, linear and branched C₁-C₂₄ alkyl groups, C₁-C₆ alkoxy groups and trifluoromethyl groups, and

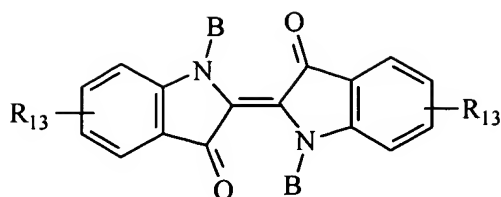
B is chosen from a hydrogen atom and groups of formula (II),

with the proviso that at least one B per formula is a group of formula (II).

35. (New) The process according to Claim 34, wherein R₇ is chosen from linear and branched C₁-C₆ alkyl groups.

36. (New) The process according to Claim 34, wherein R₉, R₁₀, R₁₁ and R₁₂, which may be identical or different, are chosen from linear and branched C₁-C₆ alkyl groups.

37. (New) The process according to Claim 26, wherein the indigo radicals are chosen from those of formula (XIII):



(XIII)

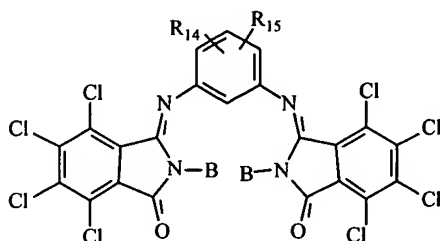
wherein

R₁₃ is chosen from a hydrogen atom, halogens, linear and branched C₁-C₆ alkyl groups, C₁-C₆ alkoxy groups and nitrile groups, and

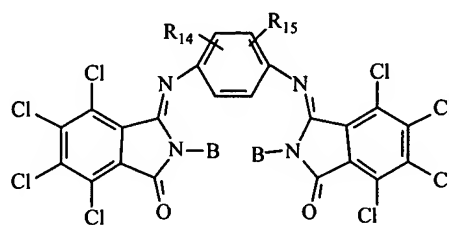
B is chosen from a hydrogen atom and groups of formula (II),

with the proviso that at least one B per formula is a group of formula (II).

38. (New) The process according to Claim 26, wherein the bisindolinone radicals are chosen from those of formulae (XIV) and (XV):



(XIV)



(XV)

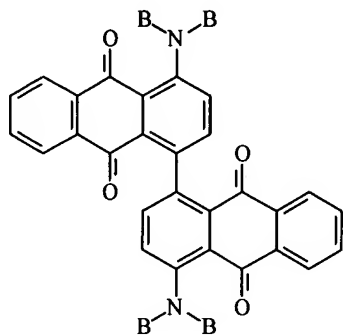
wherein

R₁₄ and R₁₅, which may be identical or different, are chosen from a hydrogen atom, halogens, and linear and branched C₁-C₄ alkyl groups, and

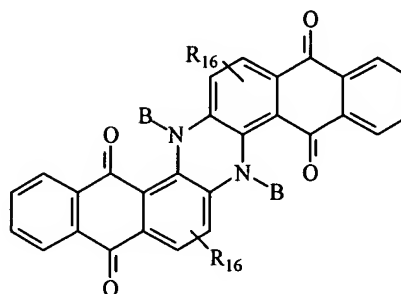
B is chosen from a hydrogen atom and groups of formula (II),

with the proviso that at least one B per formula is a group of formula (II).

39. (New) The process according to Claim 26, wherein the anthraquinoid radicals are chosen from those of formulae (XVI) and (XVII):



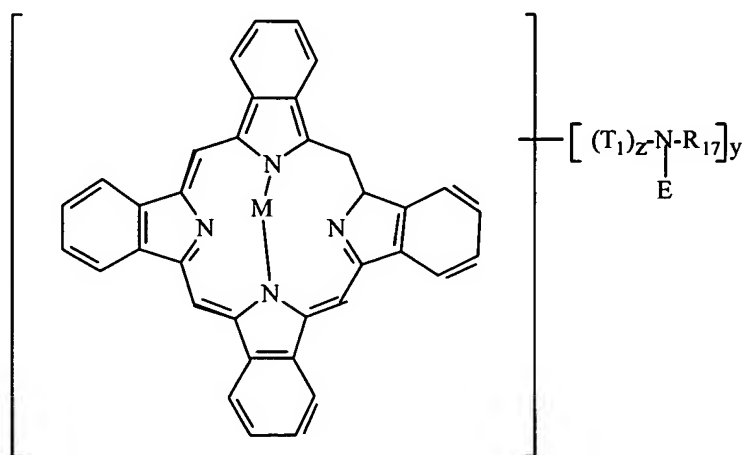
(XVI)



(XVII)

wherein R_{16} is chosen from a hydrogen atom and halogens, and B is chosen from a hydrogen atom and groups of formula (II),
 with the proviso that at least one B per formula is a group of formula (II).

40. (New) The process according to Claim 26, wherein the phthalocyanin radicals are chosen from those of formula (XVIII):



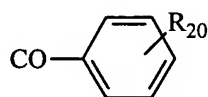
(XVIII)

wherein

M is chosen from H₂, divalent metals chosen from copper, magnesium, iron, zinc, aluminium, manganese, calcium and barium, and divalent metallic groups,

T₁ is chosen from -CHR₁₈-, -CO- and -SO₂- groups,

R₁₇ is chosen from a hydrogen atom, linear and branched C₁-C₆ alkyl groups, -N(B)R₁₈ groups, -N(B)₂ groups, -NHCOR₁₉ groups, -COR₁₉ groups, and groups of formula:



R₁₈ is chosen from a hydrogen atom and linear and branched C₁-C₆ alkyl groups,

R₁₉ is chosen from linear and branched C₁-C₆ alkyl groups,

R₂₀ is chosen from a hydrogen atom, halogens, linear and branched C₁-C₆ alkyl groups and C₁-C₆ alkoxy groups, wherein

z is equal to zero or 1,

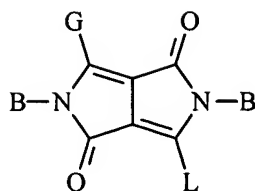
y is an integer ranging from 1 to 8, and

B is chosen from a hydrogen atom and groups of formula (II),

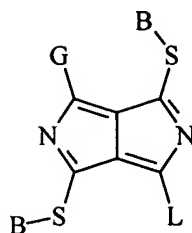
with the proviso that at least one B per formula is a group of formula (II).

41. (New) The process according to Claim 40, wherein the divalent metallic groups are MnO and TiO.

42. (New) The process according to Claim 26, wherein the pyrrolopyrrole radicals are chosen from those of formulae (XIX) and (XX):

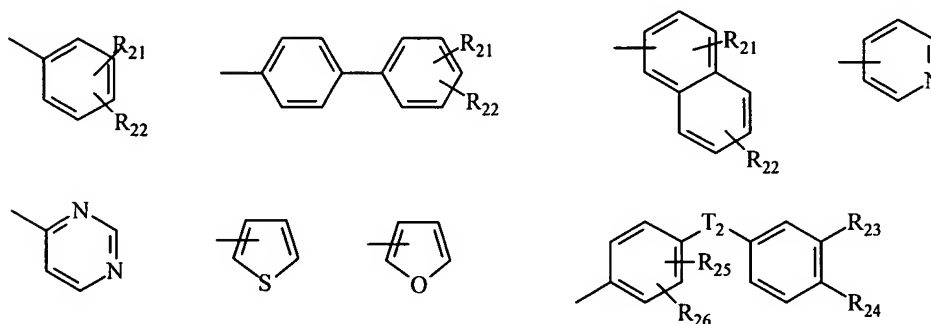


(XIX)

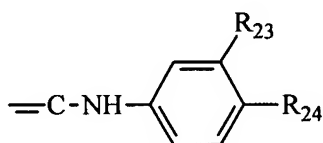


(XX)

wherein G and L, which may be identical or different, are chosen from the groups:



wherein R_{21} and R_{22} , which may be identical or different, are chosen from hydrogen atoms, halogens, linear and branched C_1 - C_{24} alkyl groups, C_1 - C_6 alkoxy groups, C_1 - C_{18} alkylthio groups, C_1 - C_{18} alkylamino groups, cyano groups, nitro groups, phenyl groups, trifluoromethyl groups, C_5 - C_6 cycloalkyl groups, $-C=N-$ groups, groups of formula



and imidazolyl, pyrazolyl, triazolyl, piperazinyl, pyrrolyl, oxazolyl, benzoxazolyl, benzothiazolyl, benzimidazolyl, morpholinyl, piperidyl and pyrrolidinyl radicals, wherein

T₂ is chosen from -CH₂-, -CH(CH₃)-, -C(CH₃)₂-, -CH=N-, -N=N-, -SO-, -SO₂- and -NHR₂₇ radicals, and oxygen and sulfur atoms,

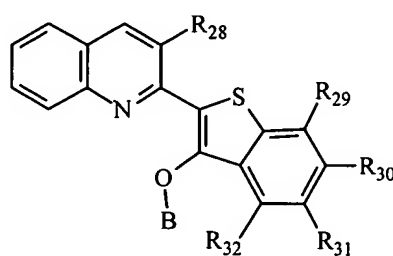
R₂₃ and R₂₄, which may be identical or different, are chosen from hydrogen atoms, halogens, linear and branched C₁-C₆ alkyl groups, C₁-C₆ alkoxy groups, and -CN groups,

R₂₅ and R₂₆, which may be identical or different, are chosen from hydrogen atoms, halogens, and linear and branched C₁-C₆ alkyl groups,

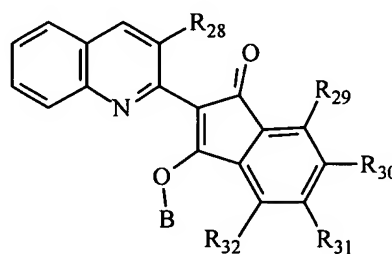
R₂₇ is chosen from a hydrogen atom and linear and branched C₁-C₆ alkyl groups, and B is chosen from a hydrogen atom and groups of formula (II), with the proviso that at least one B per formula is a group of formula (II).

43. (New) The process according to Claim 42, wherein R₂₁ and R₂₂, which may be identical or different, are chosen from linear and branched C₁-C₆ alkyl groups.

44. (New) The process according to Claim 26, wherein the quinophthalone radicals are chosen from those of formulae (XXI) and (XXII):



(XXI)



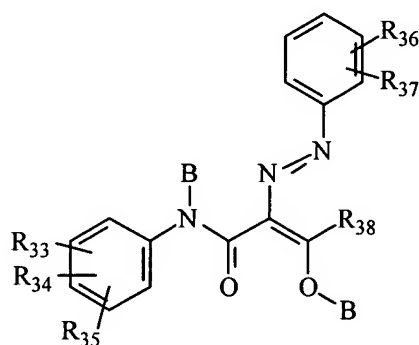
(XXII)

wherein

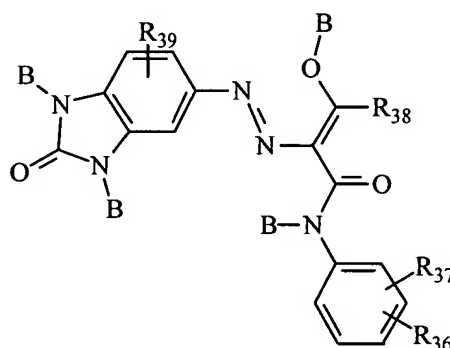
R₂₈ is chosen from a hydrogen atom and OB groups,

R_{29} , R_{30} , R_{31} and R_{32} , which may be identical or different, are chosen from hydrogen atoms, halogens, linear and branched $\text{COO}(\text{C}_1\text{-C}_6)\text{alkyl}$ groups, and linear and branched $\text{CONH}(\text{C}_1\text{-C}_6)\text{alkyl}$ groups, and B is chosen from a hydrogen atom and groups of formula (II), with the proviso that at least one-B per formula is a group of formula (II).

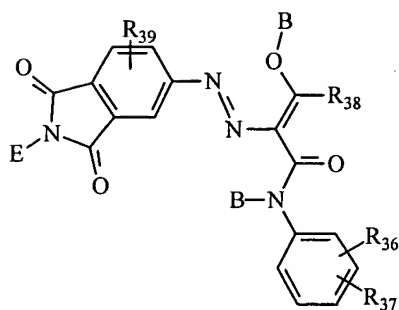
45. (New) The process according to Claim 26, wherein the azo radicals are chosen from the compounds of formulae (XXIII) to (XXVIII):



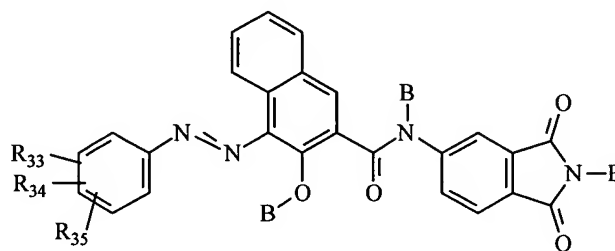
(XXIII)



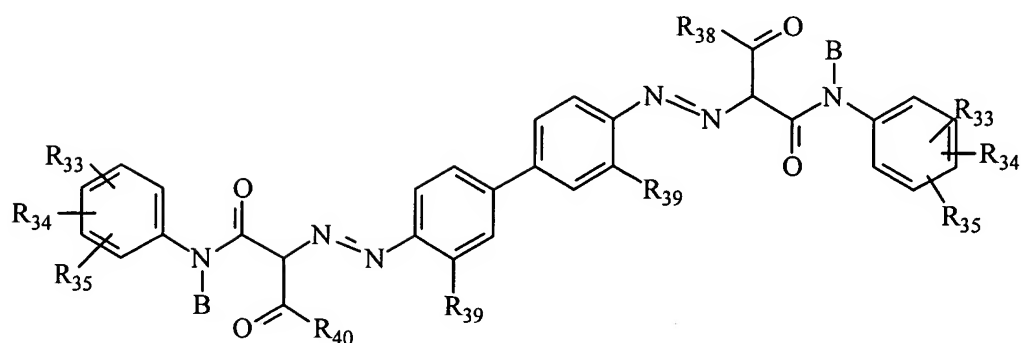
(XXIV)



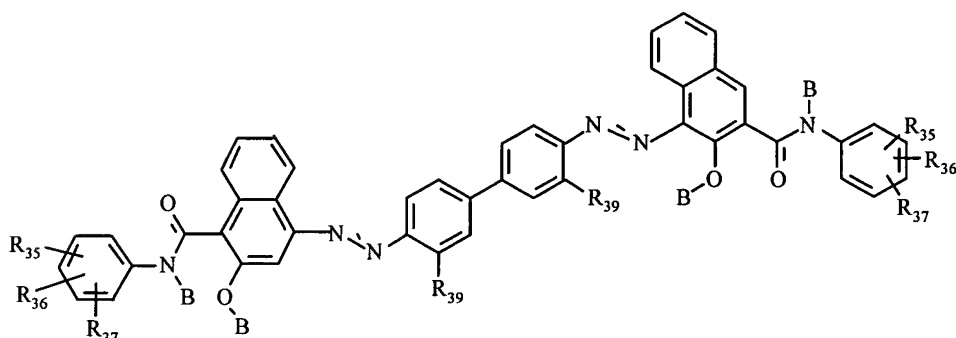
(XXV)



(XXVI)



(XXVII)



(XXVIII)

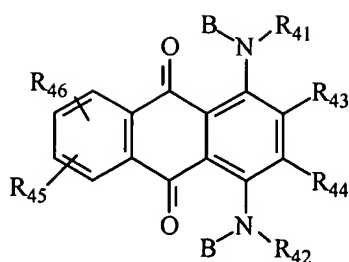
wherein

R₃₃, R₃₄, R₃₅, R₃₆, R₃₇, R₃₈ and R₄₀, which may be identical or different, are chosen from hydrogen atoms, halogens, linear and branched C₁-C₆ alkyl groups, C₁-C₆ alkoxy groups, nitro groups, acetyl groups, and SO₂NH(C₁-C₆)alkyl groups, R₃₉ is chosen from a hydrogen atom, halogens, linear and branched C₁-C₆ alkyl groups and C₁-C₆ alkoxy groups, and

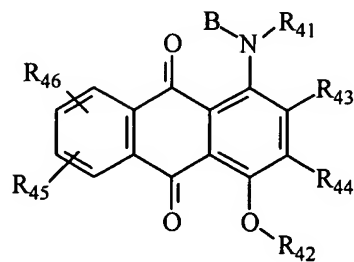
B is chosen from a hydrogen atom and groups of formula (II),

with the proviso that at least one B per formula is a group of formula (II).

46. (New) The process according to Claim 26, wherein the anthraquinone derivatives are chosen from those of formulae (XXIX) and (XXX):



(XXIX)



(XXX)

wherein:

R₄₁ and R₄₂, which may be identical or different, are chosen from hydrogen atoms, halogens, linear and branched C₁-C₁₂ alkyl groups, C₁-C₆ alkoxy groups, C₆-C₁₂ aryl groups that are unsubstituted or substituted with at least one entity chosen from halogens, linear and branched C₁-C₆ alkyl groups, nitro groups, acetyl groups, SO₂NH(C₁-C₆)alkyl groups and SO₂NH₂ groups,

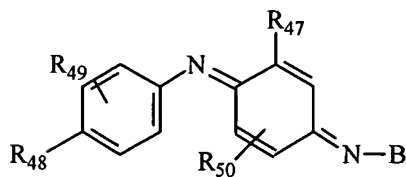
R₄₃ and R₄₄, which may be identical or different, are chosen from hydrogen atoms, halogens, linear and branched C₁-C₆ alkyl groups, C₁-C₆ alkoxy groups, nitro groups, cyano groups, CONH₂ groups, SO₂NH(C₁-C₆)alkyl groups, SO₂NH₂ groups, SO₃H groups, SO₃Na groups, and C₆-C₁₂ aryl groups that are unsubstituted or substituted with at least one entity chosen from halogens, linear and branched C₁-C₆ alkyl groups, nitro groups, acetyl groups, SO₂NH(C₁-C₆)alkyl groups and SO₂NH₂ groups,

R₄₅ and R₄₆, which may be identical or different, are chosen from hydrogen atoms, halogens, C₁-C₆ alkoxy groups, and nitro, cyano, hydroxyl and amino groups, and

B is chosen from a hydrogen atom and groups of formula (II),

with the proviso that at least one B per formula is a group of formula (II).

47. (New) The process according to Claim 26, wherein the azomethine radicals are chosen from those of formula (XXXI):



(XXXI)

wherein R₄₇, R₄₈, R₄₉ and R₅₀, which may be identical or different, are chosen from hydrogen atoms, halogens, linear and branched C₁-C₆ alkyl groups, C₁-C₆ alkoxy groups, nitro groups, cyano groups, CONH₂ groups, SO₂NH(C₁-C₆)alkyl groups, SO₂NH₂ groups, SO₃H groups, SO₃Na groups, and C₆-C₁₂ aryl groups that are unsubstituted or substituted with at least one entity chosen from halogens, linear and branched C₁-C₆ alkyl groups, nitro groups, acetyl groups, SO₂NH(C₁-C₆)alkyl groups, and SO₂NH₂ groups, and B is chosen from groups of formula (II).

48. (New) A process for dyeing keratin fibers, comprising:
- (i) applying to the keratin fibers a composition comprising, in a medium that is suitable for dyeing, at least one latent pigment, wherein the at least one latent pigment is soluble in a medium that is suitable for dyeing, and is capable of being chemically, thermally or photochemically converted in the keratin fibers into water-insoluble pigments,
 - (ii) leaving the dye composition to act on the keratin fibers for a leave-in time ranging from 1 to 60 minutes,

- (iii) optionally rinsing the hair, and then converting the at least one latent pigment to an at least one water-insoluble pigment in a manner chosen from thermal, chemical and photochemical treatment,
- (iv) washing the treated fibers with shampoo, and drying.

49. (New) The process for dyeing keratin fibres according to Claim 48, wherein the keratin fibers are human keratin fibers.

50. (New) The process for dyeing keratin fibers according to Claim 49, wherein the human keratin fibers are hair.

51. (New) The process for dyeing keratin fibers according to Claim 48, wherein the leave-in time ranges from 10 to 45 minutes.

52. (New) The process for dyeing keratin fibers according to Claim 48, wherein the at least one latent pigment is chemically converted to at least one water-insoluble pigment via an increase in pH.

53. (New) The process according to Claim 52, wherein the at least one latent pigment in the keratin fibers is treated with a solution of an alkaline compound.

54. (New) The process according to Claim 53, wherein the alkaline compound is chosen from aqueous ammonia, alkanolamines, alkaline hydroxides and alkaline carbonates.

55. (New) A cosmetic composition for dyeing keratin fibers comprising at least one latent pigment and at least one compound chosen from monoalcohols and polyols that are liquid at 25°C, acidifying agents and surfactants,

wherein the at least one latent pigment is capable of being chemically, thermally or photochemically converted in the keratin fibers into an at least one water-insoluble pigment.

56. (New) The composition according to Claim 55, wherein the at least one latent pigment is chosen from those of formula (I):



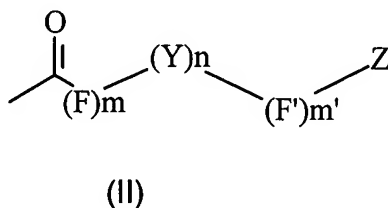
wherein:

x is an integer ranging from 1 to 8,

A is the chromophoric radical of dyes comprising a hetero atom chosen from N, O and S, wherein

- when x is equal to 1, B is chosen from groups of formula (II),
- when x is greater than 1, B is chosen from a hydrogen atom and groups of formula (II),

with the proviso that when x is greater than 1, B is at least once a group of formula (II):



wherein

Z is chosen from cationic water-solubilizing groups Z^+ and polyethylene glycol residues,

Y is a hetero atom chosen from N, O and S,

F and F', which can be identical or different, are chosen from linear and branched C₁-C₁₄ alkylene chains, which can optionally comprise hetero atoms and can optionally be substituted with at least one entity chosen from hydroxyl radicals, amino radicals, and halogens,

n, m and m', which may be identical or different are chosen from zero and 1, and

B is linked to a hetero atom of the chromophore A.

57. (New) The composition according to Claim 56, wherein Y is oxygen.

58. (New) The composition according to Claim 56, wherein Z⁺ is chosen from aliphatic groups, aromatic groups, saturated and unsaturated carbocyclic groups and heterocyclic groups, and wherein Z⁺ bears at least one quaternized nitrogen atom.

59. (New) The composition according to Claim 56, wherein the chromophoric radical A is a dye radical chosen from perylene, quinacridone, dioxazine, isoindoline, indigo, bisisoindoline, phthalocyanin, pyrrolopyrrole, quinophthalone, azo, anthraquinone, indanthrone, isoindolinone, naphthoquinone, benzoquinone and azomethine radicals.

60. (New) The composition according to Claim 55, wherein the acidifying agents are chosen from mineral and organic acidifying agents.

61. (New) The composition according to Claim 55, wherein the surfactants are chosen from nonionic, anionic, cationic and amphoteric surfactants.

62. (New) The composition according to Claim 55, wherein the at least one compound is chosen from acidifying agents and is present in the composition in an

amount ranging from 0.0001% to 20% by weight, relative to the total weight of the composition.

63. (New) The composition according to Claim 62, wherein the at least one acidifying agent is present in the composition in an amount ranging from 0.01% to 10% by weight, relative to the total weight of the composition.

64. (New) The composition according to Claim 55, wherein the at least one compound is chosen from surfactants and is present in a total amount ranging from 0.05% to 50% by weight, relative to the total weight of the composition.

65. (New) The composition according to Claim 64, wherein the at least one surfactant is present in a total amount ranging from 0.1% to 20% by weight, relative to the total weight of the composition.

66. (New) The composition according to Claim 55, wherein the at least one compound is chosen from monoalcohols and polyols that are liquid at 25°C and is present in a total amount ranging from 0.05% to 50% by weight, relative to the total weight of the composition.

67. (New) The composition according to Claim 66, wherein the at least one compound is present in a total amount ranging from 0.1% to 20% by weight, relative to the total weight of the composition.

68. (New) The composition according to Claim 55, wherein its pH is less than 7.

69. (New) A kit for dyeing keratin fibres, comprising at least two compartments, wherein the at least one first compartment comprises a dye composition comprising, in a medium that is suitable for dyeing, at least one latent pigment and at

least one compound chosen from monoalcohols and polyols that are liquid at 25°C,
acidifying agents and surfactants,

wherein the at least one latent pigment is capable of being chemically, thermally
or photochemically converted in the keratin fibres into an at least one water-insoluble
pigment; and

wherein the at least one second compartment comprises a dilute solution of a
chemical agent capable of rendering the at least one latent pigment insoluble.

70. (New) The kit for dyeing keratin fibers according to Claim 69, wherein the
keratin fibers are human keratin fibers.

71. (New) The kit for dyeing keratin fibers according to Claim 70, wherein the
human keratin fibers are hair.

72. (New) The kit according to Claim 69, wherein the at least one second
compartment comprises a solution comprising at least one alkaline compound.

73. (New) The kit according to Claim 69, wherein the at least one first
compartment comprises a composition
wherein the at least one latent pigment is chosen from those of formula (I):



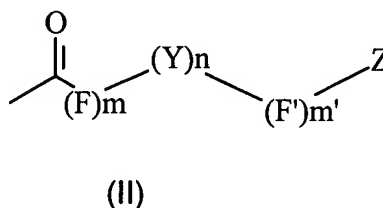
wherein:

x is an integer ranging from 1 to 8,

A is the chromophoric radical of dyes comprising a hetero atom chosen from N,
O and S, wherein

- when x is equal to 1, B is chosen from groups of formula (II),

- when x is greater than 1, B is chosen from a hydrogen atom and groups of formula (II),
with the proviso that when x is greater than 1, B is at least once a group of formula (II):



wherein

Z is chosen from cationic water-solubilizing groups Z^+ and polyethylene glycol residues,

Y is a hetero atom chosen from N, O and S,

F and F', which can be identical or different, are chosen from linear and branched C_1 - C_{14} alkylene chains, which can optionally comprise hetero atoms and can optionally be substituted with at least one entity chosen from hydroxyl radicals, amino radicals, and halogens,

n, m and m', which may be identical or different are chosen from zero and 1, and

B is linked to a hetero atom of the chromophore A.

74. (New) The kit for dyeing keratin fibers according to Claim 73, wherein Y is oxygen.

75. (New) The kit for dyeing keratin fibers according to Claim 73, wherein Z^+ is chosen from aliphatic groups, aromatic groups, saturated and unsaturated carbocyclic

groups and heterocyclic groups, and wherein Z^+ bears at least one quaternized nitrogen atom.

76. (New) The kit for dyeing keratin fibers according to Claim 73, wherein chromophoric radical A is a dye radical chosen from perylene, quinacridone, dioxazine, isoindoline, indigo, bisisoindoline, phthalocyanin, pyrrolopyrrole, quinophthalone, azo, anthraquinone, indanthrone, isoindolinone, naphthoquinone, benzoquinone and azomethine radicals.